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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,140	01/16/2004	Tonny Yu	MAIL-01000US0	7217

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EXAMINER	
PARK, JEONG S	

ART UNIT	PAPER NUMBER
2454	

MAIL DATE	DELIVERY MODE
10/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/760,140	YU, TONNY	
	Examiner	Art Unit	
	JEONG S. PARK	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 January 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/29/2008 has been entered.

Response to Arguments

2. Applicant's arguments filed 9/29/2008, with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6, 8, 10 and 13-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glass et al. (hereinafter Glass)(U.S. pub. No. 2005/0060643 A1) in view of Bruckert et al. (hereinafter Bruckert)(U.S. Patent No. 5,809,020).

Regarding claims 1 and 21-23, Glass teaches as follows:

a method for classifying email messages (system employs a case-based method of classifying email messages, see, e.g., page 16, paragraph [0195]), the method

comprising:

using each module of a plurality of different modules (document handprinting process (see, e.g., page 19, paragraph [0240]) comprises a set of fingerprinted fingers with different finger types (see, e.g., page 19, paragraph [0244] such as paragraph fingers (paragraph [00247]0, link fingers (paragraph [0250]), significant fingers (paragraph [0266]), and so on (Paragraph [00267]-[0270])) to determine a level of sameness (highest level of resemblance) of a particular email message (unclassified document) with one or more prior email messages (a set of previously classified documents)(see, e.g., page 16, paragraph [0196], lines 1-6), wherein each module determines a level of sameness in a different manner than the other modules (each fingerprinted finger extracts different finger type, see, e.g., paragraph [0247]-[[0274]), and wherein each module of at least some of the modules is assigned a non-zero weight indicative of the module's performance level (assigning weights to each finger through the use of additive information, see, e.g., page 25, paragraph [0334]);

determining an overall level of sameness for the particular email message by combining results of at least two of the plurality of different modules using the non-zero weights assigned to the modules (any two sets of fingers may be evaluated to produce two sets of similarity measurements, see, e.g., page 22, paragraph [0283] and page 27, paragraph [0350]);

adjusting the non-zero weights of at least two of the modules in response to comparing the performance levels, including increasing the non-zero weight of at least one of the modules and reducing the non-zero weight of at least another one of the

modules (shifting the weights given to each finger, see, e.g., page 25, paragraph [0334]); and

using the overall level of sameness determined for the particular email message to classify the particular email message into a category (based on resemblance level message classifier, 156 in figure 1, assigns a classification, null classification or other non-specific classification to the unclassified document, see, e.g., page 16, paragraph [0200]).

Glass teaches all the limitations of claim except for assigning weight for each module based on the performance of the each module.

Bruckert teaches as follows:

assigning weight for each channel based on received channel performance (weighting coefficients are determined based on the power of signal transmitted by base station through each different channel, see, e.g., col. 9, line 44 to col. 11, line 9 and step 261 in figure 2);

traffic channels are weighted by the determined weight coefficients (see, e.g., col. 11, lines 10-17 and step 262 in figure 2); and

the weighted signals are combined to produce a combined signal (see, e.g., col. 11, lines 18-21 and step 263 in figure 2).

Therefore Glass teaches the applicant's method of assigning weights based on the performance.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Glass to include a method of assigning weight coefficients to each

channel based on received channel signal power (equivalent to signal performance) as taught by Bruckert in order to provide a more accurate weighting to each module.

Regarding claim 2, Glass teaches as follows:

comparing the number of email messages classified in the category with a predetermined number (a given threshold); and

if the number of email messages is greater than the predetermined number then classifying the category as a first category type (classified as spam), else " classifying the category as a second category type (null classification or inbox)(when a count of messages that are in same to each other reaches or exceeds a given threshold, messages that match can be classified as spam, see, e.g., page 4, paragraph [0061], lines 1-8).

Regarding claim 3, Glass teaches as follows:

the first category type is bulk email (classified as spam)(when a count of messages that are in same to each other reaches or exceeds a given threshold, messages that match can be classified as spam, see, e.g., page 4, paragraph [0061], lines 1-8).

Regarding claim 4, Glass teaches as follows:

accepting a signal from a user input device (email client input device 176 in figure 1) to indicate processing of email messages in a category (email client device communicates with the server computer, 152 in figure 1, see, e.g., page 18, paragraph [0225] and figure 1).

Regarding claim 5, Glass teaches as follows:

the processing includes preventing the email messages in a category from being delivered to a user (similarity score value above a certain level may be automatically deleted at the email server, see, e.g., page 29, paragraph [0383], lines 23-30).

Regarding claim 6, Glass teaches as follows:

a category is commercial email (spam email)(when a count of messages that are in same to each other reaches or exceeds a given threshold, messages that match can be classified as spam, see, e.g., page 4, paragraph [0061], lines 1-8).

Regarding claim 8, Bruckert teaches as follows:

accepting a signal from a user input device to set a parameter (computing parameters, see, e.g., col. 9, lines 40-43 and step 260 in figure 2) and using the parameter to adjust a weighting (computing weighting using the computed parameter, see, e.g., col. 9, line 44 to col. 11, line 9 and step 261 in figure 2).

Therefore, they are rejected for similar reason as presented above in claim 1.

Regarding claim 10, Glass teaches as follows:

a module analyzes similarity of text in an email message (detecting document similarity based on the resulting content chunks, see, e.g., page 16, paragraph [0199]).

Regarding claim 13, Glass teaches as follows:

a module uses a hash of information in an email message (MD5 hashing algorithm used in order to convert each message body finger to a short, fixed-length

digest value, see, e.g., page 23, paragraph [0305]).

Regarding claim 14, Glass teaches as follows:

a message classification in a bulk category includes a determination of whether the number of email messages in a category exceed a predetermined number (when a count of messages that are in same to each other reaches or exceeds a given threshold, messages that match can be classified as spam, see, e.g., page 4, paragraph [0061], lines 1-8), the method further comprising:

submitting email messages in the bulk category (unclassified messages) to analysis to determine a level of commercial text (level of resemblance)(comparing the unclassified messages with a set of previously collected and classified bulk email messages samples in order to determine a highest level of resemblance, see, e.g., page 16, paragraph [0196], lines 1-6).

Regarding claim 15, Glass teaches as follows:

preventing messages with a predetermined level of commercial text from being sent to an intended recipient (similarity score value above a certain level may be automatically deleted at the email server, see, e.g., page 29, paragraph [0383], lines 23-30).

Regarding claim 16, Glass teaches as follows:

intercepting email messages from being sent to an intended recipient (new email message received by the email server, 154 in figure 1, is passed to the message classifier, 156 in figure 1, instead of passing to the email client, 170 in figure 1, see, e.g., page 29, paragraph [0371]);

collecting the intercepted messages for a period of time (handprints of intercepted messages are stored in a database table for predetermined one hour which means collecting the handprints for one hour, see, e.g., page 30, paragraph [0391]); and

determining whether the collected messages are bulk messages, and if so, submitting the email messages in the bulk category to analysis to determine a level of commercial text (comparing the unclassified messages with a set of previously collected and classified bulk email messages samples in order to determine a highest level of resemblance, see, e.g., page 16, paragraph [0196], lines 1-6).

Regarding claim 17, Glass teaches as follows:

preventing messages with a predetermined level of commercial text from being sent to an intended recipient (similarity score value above a certain level may be automatically deleted at the email server, see, e.g., page 29, paragraph [0383], lines 23-30).

Regarding claims 18-20, Glass teaches as follows:

assigning weights to each finger through the use of additive information (see, e.g., page 25, paragraph [0334]); and

shifting the weights given to each finger (see, e.g., page 25, paragraph [0334]).

Bruckert teaches as follows:

weighting coefficients are determined based on transmitted signal performance through each different channel (see, e.g., col. 9, line 44 to col. 11, line 9 and step 261 in figure 2).

Therefore Glass in view of Bruckert inherently teach assigning rating and preventing a module with a low performance level form being used in a subsequent determination of a level of sameness.

Therefore, they are rejected for similar reason as presented above in claim 1.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glass et al. (hereinafter Glass)(U.S. pub. No. 2005/0060643 A1) in view of Bruckert et al. (hereinafter Bruckert)(U.S. Patent No. 5,809,020) as applied to claim 1 above, and further in view of Horvitz (U.S. Patent No. 7,194,681 B1).

Regarding claim 7, Glass in view of Bruckert teach all the limitations of claim except for using Bayesian analysis as a classification method.

Horvitz teaches that a method assigns a measure of priority to the document by employing a text classifier such as a Bayesian classifier or a support-vector machine classifier (see, e.g., abstract).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Glass in view of Bruckert to include using Bayesian classifier as taught by Horvitz in order to effectively accomplish the text classification.

6. Claims 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glass et al. (hereinafter Glass)(U.S. pub. No. 2005/0060643 A1) in view of

Bruckert et al. (hereinafter Bruckert)(U.S. Patent No. 5,809,020) as applied to claim 1 above, and further in view of Ralston et al. (hereinafter Ralston)(U.S. Patent No. 6,842,773 B1).

Regarding claims 9, 11 and 12, Ralston teaches as follows:

a module analyzes word count in an email message (presorting messages based upon their size which inherently includes a module analyzing word count, see, e.g., col. 6, lines 53-55 and figure 3D);

a module analyzes a similarity of sender addresses (mail transfer agent, 204 in figure 2, analyzes a similarity of the sender's IP address with approved list 216 and block list 244, see, e.g., col. 4, line 58 to col. 5, line 34);

a module analyzes a similarity of network routing (remote open relay list, 828 in figure 8, can be queried to determine if a relay listed the header of an email message is an open relay, see, e.g., col. 16, lines 1-14); and

the message database, the remote open relay list, an approved list, a block list, a key word database and a local open relay list are used in determining if a received email message was most-likely sent from an unsolicited mailer (see, e.g., col. 4, lines 43-48).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Glass in view of Bruckert to include a plurality of filtering modules as taught by Ralston in order to effectively determine if the received email message sent from an unsolicited mailer with the help of the plurality of filtering modules.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEONG S. PARK whose telephone number is (571)270-1597. The examiner can normally be reached on Monday through Friday 7:00 - 3:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. P./
Examiner, Art Unit 2454

October 21, 2008

/Joseph E. Avellino/
Primary Examiner, Art Unit 2446